

**“A STUDY FOR STARTING RADIO BROADCASTS FOR
PRIMARY AND MIDDLE SCHOOL TEACHERS OF
HARYANA STATE”**

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C E R T I F I C A T E

Certified that Suresh Kumar Koushal, a student of M.Ed., has conducted and completed his dissertation on "A STUDY FOR STARTLING RADIO BROADCASTS FOR PRIMARY AND MIDDLE SCHOOL TEACHERS OF HARYANA STATE" under my supervision and guidance.

The whole work is original and is worthy of presentation to the Maharshi Dhanand University, Rohtak, in partial fulfillment of the requirements for Degree of MASTER OF EDUCATION 1986-87.

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ROHTAK



(SURESH KUMAR KAUSHAL)

DATED:

CHAPTER - I

INTRODUCTION

- 1.1 Development of Broadcasting in India.
- 1.2 Educational Broadcasting.
- 1.3 Nature of Educational Broadcasting.
- 1.4. Educational Radio Programme in India.
- 1.5 AIR School Broadcasts.
- 1.6 Emergence of the problem.
- 1.7 Statement of the problem.
- 1.8 Definition of the term used.
- 1.9 Objective
- 2.0 Delimitations.

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INTRODUCTION

In the field of education, the knowledge related to the content, methodology of teaching, techniques of evaluation, media of communication, teaching-learning process, establishing relationship between teacher, student and administrators, etc. is expanding day by day. In order to keep pace with this expanding knowledge it is desirable to have some sort of in-service programmes for the teachers.

There can be various modes of in-service programmes, such as, seminar, workshop, summer institute, conference, refresher course, etc. These modes are being used by various agencies, namely, NCERT, State Institute of Education, Extension Service Department, In - Service training centers, professional and volunteer organisations, etc. The major purpose of organising such in-service programmes is to acquaint the teachers with the latest information regarding their subjects and various other aspects of education as mentioned in the previous paragraph. But there are certain limitations of such in-service programmes. Some of the limitations are:

- It is difficult to provide inservice education to all the teachers simultaneously due to lack of funds, resource persons, administrative difficulties, etc.

- It is time consuming because it takes years together to acquaint them with the new knowledge.
- It is costly because T.A. and D.A. are to be paid both to the resource persons and participants.
- It causes inconvenience to the participants and their family.
- It, also, causes inconvenience to the organisers for arranging lodging and boarding.

Some of these limitations can be overcome by using radio as an alternative mode of in-service programme. The advantages of radio mode of in-service programme over the other modes are as follows:

- It is easy to provide inservice education to all the teachers simultaneously because the radio broadcast can be heard simultaneously at all places.
- It is economical in terms of time, money, resource persons, etc.
- It does not cause inconvenience to the teachers as well as the organisers.

Attempts have been made to evaluate a few radio projects. Aman (1976) reported that during one term the intermediate-level teachers, on an average, utilized

between 30 and 40 radio programmes and some 5 TV programmes. A comparison between different types of population districts showed that programmes utilization was lowest in large cities. School-radio programmes were listened to almost solely on tape recorders. Frey(1976) concluded that through the radio as medium we could not merely motivate the pupils and make a topic more concrete but we could also start new processes in the classroom which could develop the pupil individually and socially. Koumi (1976) conducted a project ' catering for the Individual Differences among open University Students' and found that non-listeners of radio were younger than listeners, and non-listeners obtained worse grades and had less student-tutor contact. It was concluded that non-listeners 'skimp' in their studies and in their student-tutor contact as well as in their listening. Listeners who liked the programme were older, had worse grades improved more often on subsequent grades, had experienced, and more student-tutor contact (but not significantly more).

MacMahon (1976) studied Radio socile and reported that both teachers and pupils reacted conthusiastically to radio programmes. The musci series was the most popular and in many cases the whole atmosphere of the school was changed because of these programmes.

The story telling series was also very popular though in some areas there were comprehension problems due to dialect differences. The environmental studies series were largely dependent on the teacher since it was concerned environment with developing in the children an awareness of their environment and the themes and concepts introduced needed to be developed and expanded. It was concluded that Radio Societes were an effective and valuable resource in Primary schools. Many of the research findings have already been incorporated into out-of-school educational programmes for children.

McAnany(1973) on the basis of his review of development oriented projects in the third world reported that radio (educational) is reaching only a minute fraction of its potential audience. These findings suggest that potential of radio as medium of education has not been fully exploited. At the same time, it is difficult to say that the academic gains on the participants of study group could be attributed to radio because in almost all cases radio broadcasts have been followed by group discussion or supplemented by work books, printed materials etc. Besides this it has also been reported that large pictures have a special value in the teaching of history, science, geography and the visual arts.

Many countries have enlisted broadcasting as an aid in formal classroom teaching. In certain parts of Australia Radio Correspondence courses are the only form of tuition available to children living in out lying areas. In Japan it is possible to receive secondary level diploma without spending any time in a classroom through a combined programme of correspondence courses-cum-radio lessons. The B.B.C. regularly broadcasts lessons for school children in different subjects, such as, history, Biology, genetics, music, English, Physics, Astronomy, etc. Apart from this, it does broadcasts programmes for preservice and inservice teachers. In England there is separate channel devoted to educational broadcast known as "University of the AIR". Similarly in USA there is "University of Mid America" (UMA) which has prepared multi-media packages for various grades and various subjects. The various components of multimedia package are radio, TV, local newspaper, printed material, etc. Apart from the above mentioned countries, radio broadcasting is being used in Canada China, Nigeria, Sweden, Tanzania, etc.

In India, too, the radio broadcasting is being used in her classrooms. The school broadcasting started in 1939. Today it is available from 35 stations with 20 auxiliary centers in 17 languages covering 50,000 schools (as in December, 1977). School broadcasts

cover primary and secondary schools. Further, using educational broadcasts for teacher training have been tried in Assam, Gujarat, and Maharashtra with encouraging reports. Radio support is being extended to 5 universities out of the 15 that offer correspondence courses. The Universities are Delhi Punjab, Patiala, Madurai and Kashmir. The broadcasts from Delhi, Jallunder, Madras, Tiruchirappalli and Srinagar are formal to the extent that their content is related to the prescribed syllabus.

From above citation it is clear that the radio broadcasting have been used for educational purposes in various countries at different levels. This has been done because of its potentiality to transmit the information to a large group. But the educational broadcasts have not been properly utilized by the target population. As Goel (1979) reported that the teachers are quite interested in educational broadcasts but there is lack of facilities, motivation, training, awareness and organisation. Headmasters are equally interested in educational broadcasts (Goel, 1980). Apart from the above mentioned weaknesses, there might be certain shortcomings in planning such radio programmes which might be responsible for its under utilization. In

order to make educational broadcasts effective, it is essential to know the characteristics and needs of target population, time and duration of broadcasting, facilities available for listing the broadcasts, etc. Keeping this in view the present survey was done to plan educational broadcasts for in-service school teachers of Haryana State effectively.

1.1 DEVELOPMENT OF BROADCASTING IN INDIA:

Broadcasting was introduced into India by private run Radio clubs Calcutta, Bombay, Madras and elsewhere. A regular broadcasting service, however, went on the air from 1927. When the Indian Broadcasting company Ltd., a private concern, came into being.

'All India Radio - The Government-run broadcasting set up was called the Indian State Broadcasting brought Service (ISBS), with Fielden its controller. He brought to AllIndia Radio- a name thought up by him- 'a veneer of respectability, a little polish, some enterprise, a good deal of pride and prejudice if not much sense and sensibility. ISBS was turned into AIR In June 1936'.

Now, All India Radio Comprises a countrywide network of 86 stations including two Vividh Bharti/ Commercial Centres, one at Chandigarh, the other at

Kanpur. Besides, there two auxiliary studio centres at Bhubaneshwar and Shantiniketan. As one of the largest news organisation in the World AIR puts out 70 national news bulletins in 19 languages each day, 118 Regional News Bulletins in 22 languages, and 33 tribal dialects and 63 bulletins in the External Service in 7 Indian and 18 foreign languages.

Further, AIR's 'Home Service' programmes are beamed from 157 transmitters for over - 5 lakh hours every year and cover 77.63% of the geographical area and 89.35% of the population. They thus cater to nearly all the important cultural and linguistic regions of the country.

1.2 EDUCATIONAL BROADCASTING:

Importance of educational Broadcasting cannot be overemphasized for accelerating the pace of national development in general and for bringing about qualitative as well as quantitative improvement of education in particular. This felt more significant in developing countries like Indian where socio-economic conditions is yet to reach a take-off stage and universalization of elementary education is still to be realized as per the constitutional directive. Therefore, there has been an imperative need for furthering national development in all facets of

life and for providing increased access to education both through formal and non-formal system and reducing the massive wastage and stagnation at all stage of education. Educational broadcasting is required to be potential instrument of educational advancement and an integral component of educational inputs in traditional as well as distance education or other alternative learning systems for different categories of learners.

Nature of Educational Broadcasting:

In India, a National Workshop was held at New Delhi from December 1 to 6, 1980, under the joint collaboration of the ministry of education and culture as well as the UNESCO's Asian Programmes of Educational Innovation for Development (APEID). This workshop in the fitness of things specifically viewed educational broadcasting including both radio and TV programmes.

The National Workshop thus wished that educational broadcasting would be multi-purpose and sought to make multi-pronged efforts for educational advancement. It would not only move away from narrow syllabus based approaches but also would try to reach the learners directly. It would try to reach the learners

directly. It would aim at reduction of load and drudgery in the classroom and making teaching- learning process interesting and effective. Both radio and television programmes would serve all categories of learners and provide all kinds of learning experiences- knowledge, understanding, appreciation, attitude and skills. The new curriculum with emphasis on SURW, citizenship training and national integration could be better realized with the help of educational broadcasting.

The National workshop also emphasized, in planning and production of programmes both the media- radio & television would emphasize the following national priorities at least during the next ten years:-

- a. Universalisation of elementary education both formal and non formal.
- b. Non-formal education for adults, linking education to economic and social tasks,
- c. Development of vocational and professional skills.
- d. Training of citizenship.
- e. Popularising science with a view to developing a scientific outlook.

- f. Promoting national integration.
- g. Providing information about themes of national importance - population education, energy conservation, preservation of wild life, environmental situation, nutrition and health.

Educational Radio Programmes in India:

Radio has been playing an important role for promoting relevant and interesting education. It brings the outside world into classroom and makes the educational programmes very attractive and useful. It is not only informs, but also inspires the audience. It inculcates values, develops virtues and encourages imagination. Therefore, radio has been used as a potential medium helping in realization of educational objectives most efficiently. Being an inexpensive medium, it has reached villages and is now available in every nook and corner of society. Radio is, at present, not only one of the popular mass-media, but also a potential instructional tool in the formal, informal and non formal education.

Educational broadcasts are now little over 44 years old and being beamed in 16 languages including English, from 38 stations catering to 23 states and Union Territories. With a view to reaching interior

and separated populated hilly as well forest areas these school programmes are relayed by another 25 stations.

The educational broadcasts for Secondary schools are mostly syllabus based and the subjects covered in these programmes are English, modern Indian languages, science, social studies, Sanskrit etc. Secondary school broadcasts aim at helping students and teachers by giving up-to-date content knowledge, providing new approaches and methods of teaching and filling curricular gaps. About 70,000 schools get the benefit of this service throughout the country. Besides secondary school broadcasts primary school programmes have recently assumed greater importance. This has been done in order to reduce wastage and stagnation at the primary school stage by making the school situation attractive and interesting. Dullness of the classroom, irrelevance of curriculum, rigidity of school timing are the reasons for the high percentage of dropouts. The programmes are being related to their education, health, hygiene, nutrition etc., with a thrust on bringing the audience into mainstream of national life.

There are also broadcasts for tertiary or University students which are of two kinds. One is a general and enrichment service which mainly constitute

the youth programme. These broadcasts are not syllabus-oriented and topics of general interest are discussed therein. The second category is the radio support to correspondence or distance education which is now done from four universities like Delhi, Punjabi, Madurai, and Kashmir. About 50,000 university students are the beneficiaries of this service.

Non formal education broadcasts were started from 5 stations since 1976 on an experimental basis. These programmes were broadcast to non-formal education centres where workers assemble to study in the evening between 7 to 8 P.M. or 9 to 10 P.M.

The National Adult Education Project was implemented on a massive scale by the Government of India in order to remove illiteracy from the country since October 2, 1978.

Farm Schools of the air is another example of non-formal education through the AIR. It was inaugurated in the year 1973 and thousands of farmers have registered for different courses under ~~this~~ this service.

The AIR is now giving more emphasis on the planning and production of science programmes in both the formal and non formal spheres of educational broadcasts. Special science cell have been set up in

most of the major stations of the country to improve the quantity and quality of science programmes.

There are also special programmes for teachers and teacher educators in the most of the stations. Teacher programmes have assumed more importance today than before.

In Five state like Kerala, Gujarat, Maharashtra, Assam, & Tamil Nadu there are well-organised Radio-cum-correspondence Training like language and sciences.

1.5 AIR'S SCHOOL BROADCASTS:

The history of school broadcasts in India can be traced back to the year 1938 when the Calcutta station of All India Radio introduced programmes for school for the first time. At present, as many as 32 stations regularly broadcast programmes for the schools and another 30 abiliary stations relay these programmes to reach students in the remote areas. More than 7000 programmes are broadcast for the schools every year.

Programmes for schools are broadcasts from Delhi, Calcutta, Madras & Bombay and other centres, twice or thrice a week of not more than 30 minutes duration. However, only around 20,000 out of more than 7,00,000 schools own radio sets, and more than 40% of these schools, listen more or less regularly. Few school

provide for the broadcasts on their time tables.

AIR'S school broadcasts are curriculum and classroom oriented. Further, the quality of the programmes is uneven, as few excellent teachers make excellent broadcasts. The responsibility of the broadcasts rests with AIR, not with educationists. AIR draws up programmes on the advice of consultative panels for. School Broadcasts, comprising 6 members at each station.

The Consultative panels also have representatives of the state education department, principles of schools, and AIR. Teachers are not on the panels, but works on the subjects committees which are meant to assist the panels. The pannels are set up by AIR, and educationists are invited to serve on them for a fixed period.

1.6 EMERGENCE OF THE PROBLEM:

Many studies have been conducted on School Broadcasts by a member of external agencies like State Institute of Education, NCERT, Educational Technology cells, centre of Education Technology, in many states. Some scholars have conducted few studen for their Ph.D., M.A. and M.Ed. degrees. But, in Haryana no study was conducted by any external agencies or scholars on School Broadcasts. So the Investigator decided to conduct study on School Broadcasts in Haryana State for his Med. Degree.

1.7 STATEMENT OF THE PROBLEM:

Statement of problem is- " A Survey for starting radio broadcasts for primary and middle school teachers of Haryana State."

1.8 DEFINATION OF THE TERM USED:

Words have manifold meanings so they are interpreted differently in many ways. To make the whole study understandable and investigator has to define the words and clarify the concepts used in the study.

SCHOOL BROADCASTS:

Broadcasts directly related to school contents in various subject are known as school broadcasts.

1.9 OBJECTIVES:

The investigator set the following objectives for the present investigations:

- i) To study the facilities available for listening radio broadcasts.
- ii) To know the time and programmes listened by the teachers.
- iii) To know the opinion and reasons for broadcasting educational programmes for teachers.
- iv) To know with reasons duration and time of educational broadcasting for teachers.

- v. To study with reasons the difficulties faced by teachers face for teaching various subjects.
- vi) To know prepare subjectwise list of topics where teachers face difficulty in teaching.
- vii) To know the opinion and reasons of teachers regarding difficulties related to various teaching methods.
- viii) To prepare the list of topics related to education in general and training in particular on which teachers will like to listen the radio broadcasts.
- ix) To study whether teachers will like to take an exam on topics broadcasted through radio or like to take some other benefits.
- x) To prepare the list of topics on which teachers like to write lessons for radio broadcasts.

2.0 DELIMITATIONS:

Taking into consideration the time and resources available with the investigator the study has been delimited with respect to its area, design, methodology, sample, tool and techniques employed for the investigation. Some of these are mentioned below:

1. The present study was delimited to Haryana State only.
2. The present study was delimited to all the primary and middle schools of Haryana State.

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CHAPTER - II

REVIEW OF RELATED LITERATURE

CHAPTER - II

REVIEW OF THE RELATED LITERATURE

The phrase 'review of literature' consists of two words: Review and Literature. The word Literature have conveyed different meaning from the traditional meaning. It is used with reference to the languages e.g. Hindi literature, English literature, Sanskrit literature. It includes a subject content : prose, poetry, dramas, novels stories etc. Here is research methodology the term literature refers to the knowledge of a particular area of investigation of any discipline which includes theoretical, practical and its research studies.'

The term 'review' means to organize the knowledge of the specific area of research to evolve an edifice of knowledge to show that his study would be an addition to this field. The task of review of literature is highly creative and tedious because researcher has to synthesise available knowledge of the field in a unique way to provide the rationale for his study.

The very words 'review' and 'literature' have quite different meanings in the historical approach. In historical research, the researcher does much more than review already published material, he seeks to discover and to integrate new information which has never been reported and never considered. The concept and process implied in the term

'review of literature' have such different meanings in historical as compared with survey and experimental research.

The term 'review of literature' has been defined in the following ways:

According to Good, Barr and Scates -

"The competent physician must keep abreast of the latest discoveries in the field of medicine... Obviously the careful student of education, the research worker and investigator should become familiar with location and use of sources of educational information.

According to W.R.Borg-

The literature in any field forms the foundation upon which all future work will be built. If we fail to build the foundation of knowledge provided by the review of literature our work is likely to be shallow and naive and will often duplicate work that has already been done better by some one else."

According to John W. Best-

"Particallly all human knowledge can be found in books and libraries. Unlike other animals that must start a new with each generation, man builds upon the accumulated and recorded knowledge of the past. His constant adding to the vast store of knowledge makes possible progress in all areas of human endeavour."

Need of Review of Literature

The review of literature is essential due to following reasons:

1. One of the early steps in planning a research work is to review research done previously in the particularly area of interest and relevant area quantitative and qualitative analysis of this research usually gives the worker an indication of the direction.
2. It is very essential for every investigator to be up-to-date in his information about the literature, related to his own problem already done by others. It is considered the most important pre-requisite to actual planning and conducting the study.
3. It avoids the replication of the study of findings to take an advantage from similar or related literature as regards, to methodology, techniques of data collection, procedure adopted and conclusions drawn. He can justify his own endeavour in the field.
4. It provides as source of problem of study, an analogy may be drawn for identifying and selecting his own problem of research. The researcher formulates his hypotheses on the basis of review of literatures. It also provides the rationale for the study. The results and findings of the study can also be discussed at length.

The review of literature indicates the clear picture of the problem to be solved. The scholarship in the field can be developed by reviewing the literature of the field.

Objectives of Review of Literature

The review of literature serves the following purposes in conducting research work:-

1. It provides theories, ideas, explanations or hypotheses which may prove useful in the formulation of a new problem.
2. It indicates whether the evidence already available solves the problem adequately without requiring further investigation. It avoids the application.
3. It provides the sources for hypotheses. The researcher can formulate research hypotheses on the basis of available studies.
4. It suggests, method, procedure, sources of data and statistical techniques appropriate to the solution of the problem.
5. It locates comparative data and findings useful in the interpretation and discussion of results. The conclusions drawn in the related studies may be significantly compared and may be used as the subject for the findings of the study.

6. It helps in developing expertize and general scholarship of the investigator in the area investigated.
7. It contributes towards the accurate knowledge of the evidence or literature in one's area of activity is a good avenue towards making oneself. This knowledge is an asset ever afterwards, whether one is employed in an institution of higher learning or a research organization.

The investigator studied a number of books, journals and dissertations on the topic similar to related literature led him to direct his study on the right path. It will be effort of the investigator in this chapter to enumerate in the various books, journals and dissertation and the help they provided him during research.

Number of researchers have been conducted on school Broadcasts in India. First by Narendra Kumar (1954-55) at University of London Institute of Education conducted to survey, one in the Delhi and other in Bombay. The listeners research unit of All India Radio (1962) conducted a series of 'on-the-spot- investigation" at Bombay, Nasik, Poona, Madras, Calcutta, Brbhum, Murshidabad and Bangalore. The Centre of Educational Technology (CEP) has been conducting a series of indepth studies on instructional radio from the mid seventies. The studies were

done in Jaipur (Rajasthan), Jalgon (1977, Maharashtra) and Delhi (1980). Another study was conducted by the Centre of Education Technology, NCERT in the year 1980 on the Educational radio programme for the schools and role of State Educational Technology cells. Educational Technology Cells, Orissa, conducted a number of studies on School Broadcast Programmes in the year 1974, 1975 and 1976 by All India Radio, Cuttack, Educational Technology Cell, Orissa (1977) was conducted a study "An evaluative study of the School Broadcasting Programmes." Department of E.T. SCERT, Orissa (1982) also conducted a study B. Biswal (1981-82) also conducted a study in Orissa, S. Das (1981) conducted a study under Utkal University. All these studies were conducted in India. The major findings of these studies are briefly described below.

Narandera Kumar (1954-55) 'for his Master's Degree in Education at the University of London Institute of Education' conducted two surveys, one in the then state of Delhi and the other in the then state of Bombay on School Broadcasting. The main methods of his study were (1) visits to schools in Delhi during listening hour and (2) reaction through correspondence i.e. responses to questionnaires in Bombay city. The major findings of his survey were as follows:

1. In Delhi 92 schools out of a total of 323 had listening facilities.
2. Out of the 57 schools visited, 44 had one radio set each, 13 were equipped with public address system 7 had provided listening period in the time table, listening was occasional in case of 15 schools and rarely in case of 35 schools.
3. In all listening schools, except three, reception was very poor. Teachers were found relaxing happily and the students busy gossiping.
4. There was no provision for either preparation or follow up activities. Pre and post broadcast discussions were no existent.
5. Reasons for not listening were cited as (i) the school syllabus was overrowed. (ii) There are the many extra curricular activities. (iii) because of the double shift system schools were too hard-pressed for time. (iv) absence of an audition to accommodate all the classes for listening.
6. Lack of funds for installing loudspeaker in each room and programmes were not of any special value and teachers felt that they could do better in most cases.

The survey of school broadcasting through questionnaire received from 40 out of 126 schools the following findings:-

1. In Bombay out of 800 schools 402 had listening facilities.
2. 75 percent of the schools used to listen the school broadcasting programmes regularly and 60 percent casually.
3. Provision in the time table for listening existed 20 percent of the schools.
4. In case of 20 percent of schools, teachers used to prepare the class before broadcast, in 32 percent of schools they used to conducted follow up activities.
5. Reception was very poor.
6. Reasons for not listening to educational radio were (i) time inconvenient (ii) subjects chosen for programming general and difficult (iii) presentation dull and too fast. (iv) too much time wasted in musical interludes (v) too many extra curricular activities.

The listeners research unit of All India Radio conducted a series of 'on-the-spot investigations' during 1962-1964 at Bombay, Nasik, Poona, Madras, Calcutta,

Birbhum, Murshidabad and Bangalore. Most of the findings of these studies only corroborate those of Narendra Kumar's surveys conducted in 1954-55. Some highlights of the All India Radio studies were as follows:

1. The teachers took occasional interest in schools broadcast.
2. The school syllabi were over crowded.
3. There was paucity of time even to complete the prescribed courses of studies.
4. The classes were over crowded.
5. Educational system was examination oriented.

All India Radio conducted another survey in 1972 showed that there was hardly any organised listening in schools. Major difficulties as revealed in this survey were (i) problem of maintenance of radio set, (ii) Lack of technical equipment like microphone and amplifiers. (iii) Want of suitable atmosphere for concentrates listening e.g. lack of space, over crowded classrooms. (iv) examination mindedness of the teacher who did not consider educational radios an aid and (v) lack of organised feedback of the impact of the school broadcast programmes.

The Centre for Educational Technology has been conducting a series of in-depth studies on instructional radio from the mid seventies. The initial study was done in Jaipur (Rajasthan) where a very dismal picture of radio utilisation was revealed, as only 11 percent of schools were found utilising radio. The next study was done in Jalgaon (Maharashtra) which revealed that as many as 92 percent of primary schools covered by an action programme were found utilising radio against only 25 percent of schools in the same district not covered under the programme.

The Centre for Educational Technology, NCERT (1977) was conducted in Delhi and brought out its report in 1980. Data were collected through observation techniques from a randomly drawn sample of 205 middle and secondary schools and by interviewing teachers.

Another study was conducted by the Centre for Educational Technology, NCERT in the year 1980 on the educational radio programme for the schools and the role of State educational Technology cells. The important findings to this CET study were follows:

1. Need based programmes that are interesting and comprehensible would be the first major step towards their acceptability by the schools.

2. E.T. Cells may encourage schools to go in for radio sets by utilising school fund, through parent teacher association, (b) through donations by philanthropic institutions and individuals and (c) through assistance from international agencies like UNICEF.
3. A system should be developed in the education department to ensure early repair of sets and replacing batteries etc. A list of do it yourself tips may be publicised for minor repairs. of radio.
4. Adequate awareness should be created among the schools by involving field supervisory staff in the school broadcast service and issuing regular circulars/communication by the education department through E.T.cells.
5. Training courses for user teachers should be organised in conducting radio listening in class, pre- and post broadcasts discussions, use of support materials and follow-up activities with the students.
6. Up to date information about schools having receiving facilities is not readily available in the most of states. This should be done for planning school broadcasting and communicating with the listening schools.

7. Well designed evaluation studies on school radio would help E.T.cells to build information base on school radio, determine status of utilisation of the medium and identify the factors that contributed to its success or impede its progress. Besides questionnaires, personal visits and interviews would be necessary for the purpose.

Educational Technology Cells, Orissa took active interest in educational broadcasting and conducted a number of studies on school Broadcast Programmes in the year 1974, 1975 and 1976 by All India Radio, Cuttack. Data was collected in relation to school programmes in various curricular subjects. The objective of the study were mainly to evaluate the quality to the programmes and identify the problems faced by teachers in their effective utilisation. Questionnaire was the main instrument of collecting data and the following findings were made on analysis of these data.

1. More weight was given on the subjects like General Science, English and Sanskrit.
2. The students were not usually exposed to the school Broadcast programmes in their own classroom.
3. The teacher did not seem to have attended school Broadcast Programmes along with the pupils.

4. Most of the programmes were produced in the prosail formats like narration and dissertation.
5. Curricular topics were the theme of the most of the programmes.
6. The voice of the presenters of the most programmes was distinct and normal.
7. The programmes mostly contributed to the development of knowledge of teachers as well as students.
8. Pre and post broadcast discussions were not organised in the most of the schools.
9. The English programmes had more scope for improvement regarding presentation, elaboration and discussion.
10. Good listening sets and landspeakers to each room may be provided for better reception.

Educational Technology Cell, Orissa (1977) was conducted 'a study "An evaluate study of the school Broadcasting Programmes. data were collected mainly through questionnaire only in the programmes in English for class VIII. The main objectives of the study were to identify the nature and content of the programmes, to assess suitability of language, to know about the pre and post broadcast discussion and to ascertain the pupils growth and teachers professional growth.

Department of E.T.SCERT, Orissa (1982) was conducted a study 'An on the spot Evaluative study of School Broadcasts Programmes in the Towns of Cutback and Bhubaneswar.

B. Biswal (1981982) conducted a study on developing strategies for effective utilisation of school broadcast programmes in Orissa for his Ph.D. degree under M.S. University of Baroda. A few major findings of his study were as follows:

1. Number of programmes broadcast for any particular grade was quite inadequate to cover the syllabus.
2. Subjects like Mathematics, Physiology and Hygiene, Agricultural Science etc., were totally neglected.
3. No planned approach was made to select the number of programmes for various grades.
4. Grade X did not have any programmes in the system.
5. Scripwriters were not given training for writing suitable radio lessons.
6. 62 percent of the schools were found not using the school broadcasting programmes at all.
7. In 46 per cent schools students used to listen to the same in the places like varondah, staff common room, headmaster's @ffice, drama pandal and under the tree.

8. Only 13 percent of the students reported that their teachers conducted pre and post broadcasts activities, whereas 75 percent of them felt the necessity of conducting such activities.

It is evident from the above studies that research studies are being undertaken in the field of school radio by individuals and agencies and bringing to light various problems standing in way of effective utilization of school broadcasts. The studies were started in 1954 on School Broadcasts but today, the utilisation of school broadcast is poor. The use of school broadcast are rarely. So it is depressing to note that a large amount of money and effort is just slipping by without even being taken note by those for whom the investment has been made.

CHAPTER - III

DESIGN OF THE STUDY

- 3.0 Introduction.
- 3.1 Methodology.
- 3.2 Sampling.
- 3.3 Procedure of study.
- 3.4 Discription of tools.
- 3.5. Statistical technique.

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C H A P T E R - III

DESIGN OF THE STUDY

3.0 INTRODUCTION

"Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The Design is the overall scheme or programme of the research. It is the blue print of procedures that enable the researcher to test hypotheses by reaching valid conclusions about relationship about relationship between independent and dependent variable. In the view of Fred. N. Korlinger, "Research design has two basic purpose - (1) to provide answers to research questions and (2) to control variance to. Hence research design are devised to enable the researcher to justify research findings in terms of reliability, validity, objectivity and accuracy.

The present chapter embodies the design of study. This study attempts to investigate the extent of radio utilization and teacher's attitude towards school broadcasts. This chapter embodies the methodology, sampling, procedure, tools and relevant statistical techniques employed in conducting the present study.

3.1. METHODOLOGY:

The present investigation has been conducted through normative survey-method. With the help of survey method data gathered from a relatively large number of cases at a particular time. It is not concerned with characteristics of individuals as individuals. It is concerned with the generalized statistics that result when data abstracted from a number of individual cases. It is essentially cross-sectional.

3.2. SAMPLING:

According to John. W. Best - " A sample is a small proportion of a population selected for observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn". In fact, generalization of research findings depend upon sampling techniques. Truly representative sample lays foundation of new theory or invention. Jhonson (1961) defines, " A representative sample is one in which the measurements made on its units are equivalent to those which would be obtained by measuring all the elements of the population except for the inaccuracy due to limited size of sample". It is not

possible to collect data for the whole population in any investigation. Investigator has to select a representative group of individuals from the population about which the investigator intends to study.

The sample of the survey consisted of 400 teachers in primary and middle schools situated both in urban and rural areas of Haryana. Further, the sample constituted of teachers belonging to Rohtak, Bhiwani, Sonapat, Gurgaon, Mohendergarh, Hisar of Haryana. Area-wise and school-wise distribution of sample is given in Table No. 1.

TABLE 1: Area-wise and School-wise distribution of teachers.

Urban Area		Rural Area	
Primary School	Middle School	Primary School	Middle School
30% 25%	20%	25%	30%

From Table 1, it is evident that ~~sixty~~ 45% of teachers were from urban area and 55% from rural area. While the sample consisted of fifty percent of teachers who were teaching in primary schools and remaining fifty percent were teaching in middle schools (Vide Table 1.)

The distribution of the sample in respect of Sex, qualifications and teaching experience is given in Table 2.

TABLE: 2. Sexwise, qualificationwise, and teaching experience distribution of sample

SEX	
MALE	FEMALE
60%	40%

II. Qualifications

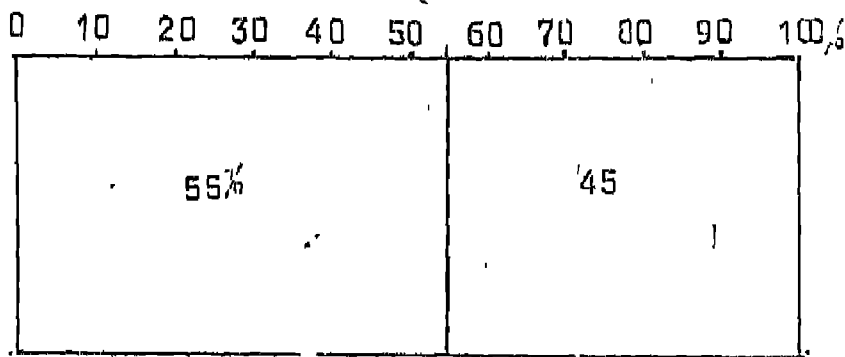
Matric/J.B.T.	Graduate	Post Graduate	M.Phil/ Ph.d.
36%	39%	23.5%	1%

iii. Teaching Experience.

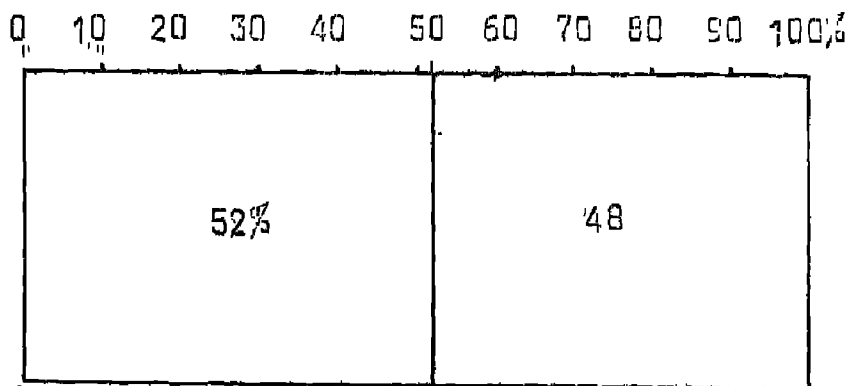
1-5Years	6-10Yrs.	11-15 Yrs.	16-20 Yrs.	21-25 Yrs.	25 & above. Yrs.
47.75%	11.05%	15%	13.25%	7.05%	6%

From Table 2, it can be seen that the sample consisted of 60% male teachers and 40% of female teachers. Further with respect to qualification it was found that 36% of teachers were matric/J.B.T. 39 Graduate, 23.5 post-graduate & 1% M.Phil/Ph.D. Regarding teaching experience

According to Rural and Urban Schools Distribution.

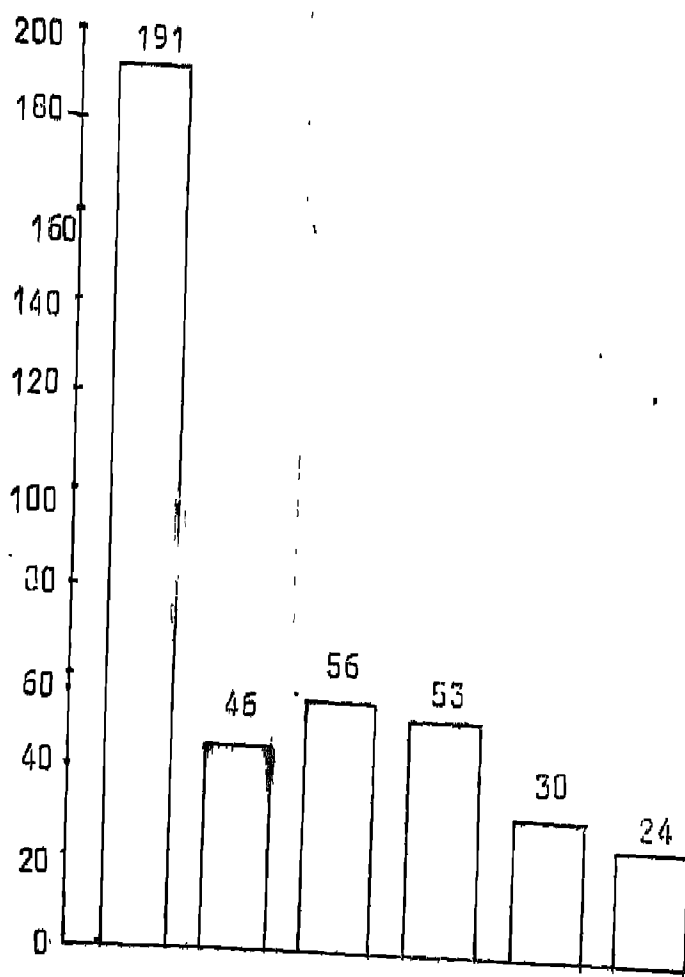


According to Male and Female Teachers Distribution



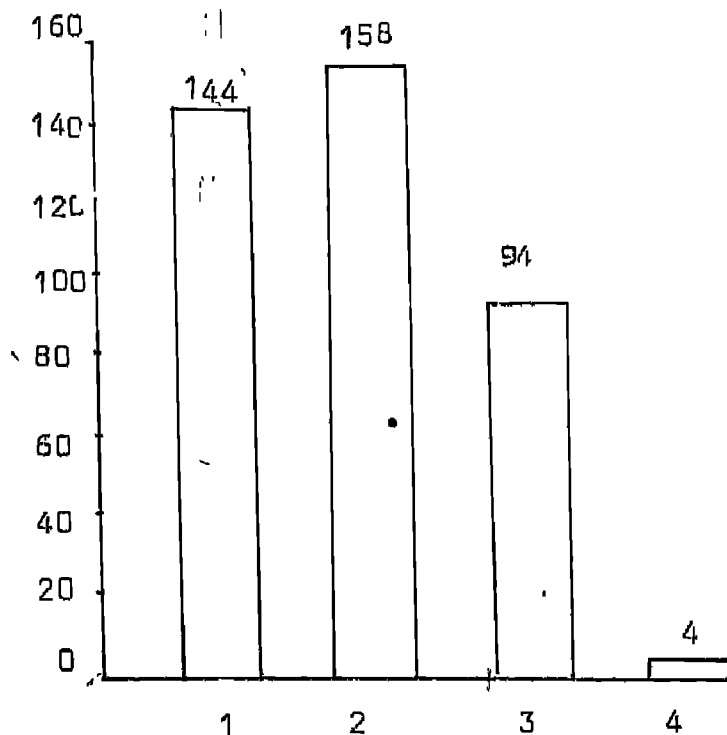
Index: 1 cm = 10 %

According to Teaching Experience Distribution



Index: 1 cm = 20 teachers

According to Teachers Qualification Distribution



Index: 1 cm = 20 teach

1. Matric/J.D.T.
2. Graduate
3. Post graduate
4. M.Phil/Ph.D.

it was found that 47.5% of teachers were having teaching experience ranging from 1-5 years, 11.05 of teachers had teaching experience ranging from 6-10 years and the remain had 11-15 years teaching experience 15%, 13.25% teachers were having teaching experience once ranging from 16-20 7.05 % teachers were having teaching experience ranging from 20-25 abd the remaining above 25 years teaching experience 6%.

3.3 PROCEDURE OF STUDY:

In the present study the data were collected from all twenty three schools of the sample in the months of April-May 1987. The data were collected by personal visits to various schools.

On a visiting a school, the head of the school was interviewed first. Usually the class teachers also joined the discussion. After interview of the head, the questionnaire was distributed to all the teachers of the school. The information was collected with the help of a questionnaire, but the emphasis was to get in-depth information through informal talks as well.

3.4. DESCRIPTION OF TOOLS:

In order to achieve the objectives of stddy, the following tool was used:-

Questionnaire:

For the present survey an open end questionnaire was developed in the Department of Education, University of M.D.University Rohtak. It was designed to collect information from the teachers regarding different aspects of radio broadcasts such as time, duration, nature of programme, etc. The teachers were to give their responses along with reasons. In all, there were eighteen statements of these six statements were related to demographical variables, such as, name of the teacher, name of school educational qualifications, sex, classes taught, and teaching experience. Remaining twelve statements were related to different aspects of radio broadcasts.

Inquiry forms are a class of data gathering devices which make use of properly prepared proformas or forms for inquiring into and securing information about certain phenomena out of a number of such inquiry forms, perhaps the most used and most abused of tools is the "Questionnaire"

"In general the word questionnaire refers to a device for securing answers to questions by using a form which the respondent fills in himself". Goode and Hatl.

Barr, Davis and Johnson define questionnaire as, "a systematic compilation of questions that are submitted to a sampling of population from which information is desired."

Actually the questionnaire has unique advantages and if properly constructed and administered, it may serve as the most appropriate and useful data gathering device in research project. There are two forms of questionnaire.

1. Open forms
2. Closed form.

Questionnaire that calls for short, check responses are known as the re-stricted or closed form type and the open form or unrestricted type of questionnaire calls for a free responses in the respondent's own words. For the present study, the investigator has selected and employed closed form type questionnaire. In questionnaire, each item have three point rating scale viz Agree, Cannot say, Disagree and each respondent has to choose one of the three according to his view. Instructions to the respondent were fully clear and in the point page of the questionnaire spaces were provided to write respondent's name, school name, and date. Then it was produced before the staff for their view & criticism. Finally the irrevalent and inappropriate items were strucked in the end.

After the correction and editing, the questionnaire was given for cyclostyling and was made ready for administration.

3.5 STATISTICAL TECHNIQUE:

The main statistical techniques employed was briefly described below:-

CHI-SQUARE

Chi-square test is one of the simplest and yet more useful non-parametric statistical technique devised to analyse and to interpret the frequency data. The function of this statistical test, is to compare obtained results with those to be expected on the basis of chance and to test the significances of difference between the obtained results and the expected results. The results can be expected on the assumption of three basic principles.

1. Normality
2. Independence
3. Equality.

The formula for calculating chi-square is:

$$\chi^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$

Where χ^2 = Chi-square

Σ = Sum total of

f_o = obtained frequency

f_e = expected frequency.

The investigator has employed the assumption of equality to test the significance of difference between the obtained results and the results to be expected on the basis of chance, since the equality assumption is a simple and mostly used method to test the significance of difference. The result obtained from the sample of students through questionnaire have been analysed by employing this technique questionwise with reference to several alternatives provided there in.

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CHAPTER - IV

DATA ANALYSIS AND ITS INTERPRETATION

C H A P T E R -IV

ANALYSIS AND ITS INTERPRETATION

After collecting the data the investigation has analysed the data and has applied certain statistical technique for proper interpretation and certain conclusions. Sources have no value without proper analysis and interpretation. The investigator also cannot achieve the objectives without proper interpreting the data collected through various tools for the study. The analysis and interpretation lead towards certain definite conclusions and suggestions for further studies. Thus it is very essential to have a meaningful information from the data collected by applying various statistical technique. The main purpose of this chapter is to analyse and interpret the raw information collected by applying various test.

"The process of interpretation is essentially one of stating what the results (findings) show. What do they mean? What is their significance? What is the answer of the original problem? That is all the limitations of the data must enter into and become a part of interpretation of the results". Says Good, Barr and Scates.

The most commonly stated plea (20) for non-utilization of school broadcasts was that time table was already too crowded to accommodate radio listening. Consequently, listening to radio disrupted on going class teaching. When asked whether they would be able to include a period on radio listening in the time table on being directed to do so by the State education department, all Headmaster's replied that they would do so. But on their own the headmaster in general shows their disinclination to include a period in the time table for radio listening. This points towards the need of planning placing greater emphasis on radio listening in the schools by the higher authorities.

RESULTS:

The results pertaining to different aspects of broadcasts are given separately here under.

3.6 FACILITIES AVAILABLE FOR LISTENING RADIO BROADCASTS

Before starting any radio broadcasts for a specific target population, it is essential to know whether they have facilities for listening the broadcasts. If this requirement is met, then and only then the broadcasts will be of some use. In this context, it was thought to explore the extent to which this requirement is met. The survey revealed that

84.5% of teachers had their own radio set 5.75% have facilities for listening the broadcasts and the remaining stated that they will be purchasing the radio in the near future. It may, therefore, be said that majority of the teachers (90%) have the facilities for listening the radio broadcasts. Therefore, the radio programme may be broadcasted for the teachers teaching in primary and middle schools.

3.7 TIME AND PROGRAMMES LISTENED:

With respect to time, it was found that 54% of teachers listen different radio programmes in the evening, 40% of them listen the radio programmes in the morning and the remaining do not listen any radio programmes. Majority of teachers are free in the evening and, therefore, they listen radio programmes which are broadcasted in the evening.

Through study it was found that teachers listen variety of programmes. Various programmes listened by teachers are as follows:

1. Vividh Bharati. 68.5%
2. Sangeet Sarita. 27.25%
3. Hawa Mahal. 41.25%
4. Sri-Lanka-Binaca. 15.25%
5. School Broadcasts. 50.25%

6.	News from A.I.R. and B.B.C.,	27.25%
7.	Lok Geet.	52%
8.	Old films song.	36%
9.	Others programmes.	33%

3.8 RADIO BROADCASTS FOR TEACHERS:

Before starting the broadcasts of a new programme for a specific target audience, it is essential to have their reactions for its utility. Keeping this in mind, opinion of the teachers with reasons were sought for starting radio broadcasts for teachers. The survey revealed that 88% of teachers were of the opinion that there should be a separate radio broadcasts for teachers. The various reasons given by them were:

- They want to acquaint themselves with content and teaching methods of various subjects.
- It will help them in making teaching-learning process more effective.
- It will help them in overcoming difficulties related to their profession.
- They will be able to grow professionally.
- The programmes will be indirectly beneficial to students because they will be taught by using new methods of teaching.
- Such programmes will be helpful in improving the standard of education which ultimately lead to the development of nation.

Apart from them, 5% of teachers were of the opinion that they do not want to listen any programme broadcasted for them. They did not mention any reason for their opinion. Remaining 7% of teachers did not respond to this question.

From here it may be inferred that the radio broadcaste for teachers will be useful to them in improving their teaching. So a programme for them may be carefully planned and regularly broadcasted on different topics and approaches.

DURATION AND TIME OF BROADCASTS FOR TEACHERS

3.9 As mentioned in caption majority of teachers were of the opinion that there should be boardcasts for them. The next question arises what should be the duration and time of such broadcasts? In order to get a structured response with respect to duration, five choices, viz. 10,15 30 and above were given in the questionnaire. The result regarding duration is given in Table 3.

Table : 3

Durationwise Percentage of Responses

Duration in Min.	Percentage of responses
10	15
15	16
30	46
Above	20
No response	3
Total	100

From Table 3, it can be observed that majority 46% of teachers were of the opinion that the radio broadcasts should be of 30 minutes duration. They opined that more than 30 mins. duration is too lengthy to listen with concentration. On the other hand less than 30 minutes broadcasts is too short to give lesson on any content and method. Thus, the duration for the broadcasts may be of 30 minutes.

After deciding duration of the broadcasts it is essential to know the time of broadcasts from the target audience. In this context, through this survey it was found that majority of teachers 73% would like to listen the broadcasts in the evening hours 12% of them in the morning, 2% during the recess period and 3% of teachers did not respond to the question. The reasons given by majority of teachers for having the broadcasts in the evening were as listed below:

- They have free time during evening hours.
- The reception of the programme is more clear in the evening than the noon.
- The best utilization of the free time in the evening.
- They said that they are busy in the morning hours. In noon they are in school where lot of noise and disturbance prevail. Therefore, only evening time will be appropriate for the broadcasts.
- The broadcasts in the evening can be listened with concentration because of peaceful and calm environment in the home.

- Even the routine radio programmes are listened in the evening by majority of teachers as reported in Caption.

It may, therefore, be concluded that the duration of the broadcasts should be of 30 mins. and it should be in the evening.

4.0 DIFFICULTIES FACED BY TEACHERS FOR TEACHING VARIOUS SUBJECTS

To make broadcasts effective, it is desirable to know the needs of target audience and accordingly broadcasts need based programme. Keeping this in view, an attempt was made to find out the difficulties faced by teachers for teaching various subjects. Through survey it was found that 70% percent of teachers have difficulties in teaching one or the other subject at primary and middle stages. 20% of teachers were of the opinion that they do not have any difficulty in teaching various subjects and 10% of teachers did not respond to this question. The former group have difficulties in teaching Science, Mathematics, English, Geography, and Sanskrit. On the other hand, some teachers face difficulty in teaching Hindi alphabets to primary students. The various reasons given by them are as follow:

- They do not have mastery over the content.
- They did not study the subject, during their student life.
- They did not have training in teaching the particular subject.
- The teachers were of the opinion that they are unable to make students understand certain difficult concepts although teachers know the content.
- The teachers face difficulty in arousing interest in students due to lack of pre-requisites.
- Science teachers face difficulties in teaching science due to lack of apparatus, equipment, chemicals, teaching aids, etc.
- Some of the language teachers expressed that they do not know the correct pronunciation of certain words. So they find it difficult to teach correct pronunciation. They strongly recommended broadcasts on pronunciation.

From this survey it can be concluded that broadcasts should centre around languages, science, mathematics, and geography subjects.

4.1 SUBJECTWISE LIST OF TOPICS FOR BROADCASTS

In the previous caption, the list of those subjects where teachers have difficulty in teaching has been given. From this list it is difficult to find out the topics on which broadcasts should be given. To know the specific topics for the broadcasts one question related

to it was given in the questionnaire. The subjectwise topics suggested by the teachers are as follows:

Language

- | | |
|----------|--|
| Hindi | - Grammer, Stories, poems, Pronounciation and Kabir Ka Raheshya Vad. |
| English | Grammer and Pronounciation and,poems. |
| Sanskrit | -Grammer Pronounciaion. |

Science

- | | |
|--------------|---|
| Physics | -Force, weight, energy, nuclear energy, heat, light, electficity, magnesium and space research. |
| Chemistry | -Atom, element, molecule, chemical bonding and chemical reaction- |
| Biology | -Plant life, various systems of human body respiratory circulatory nervous and skeleton system, balanced diet, role of vitamins and population education. |
| Mathematics | -Geometry and modern mathematics. |
| Geography | -Climate, soil, minerals, our Universe and solar system, how to use globe and maps, motion of earth and industries of India. |
| Social study | -Parliament, fundamental rights, democracy, freedom movement of India. |

4.2 DIFFICULTIES RELATED TO METHODS OF TEACHING

Regarding the difficulties faced by the teachers in respect of methods of teaching, it was found that 72 percent of teachers expressed that they have difficulty related to methods of teaching. Of the remaining ten percent, 12 percent of teachers were of the opinion that they do not have any difficulty related to methods of teaching and 10% percent of teachers did not respond to this question. The various ~~give~~ reasons given by teachers in this respect are as given below:

- The understanding of various methods of teaching will help them in solving problems related to teaching-learning process.
- The teaching efficiency will be increased by having the knowledge of various methods of teaching.
- The knowledge of methods of teaching will help them to bring variety in the classroom, to make teaching more interesting and useful, to gain self-confidence, etc.

Since majority of teachers are found to have difficulties related to methods of teaching, so some of the broadcasts should be centred around various methods of teaching.

4.3 XX XXX

TOPICS RELATED TO EDUCATION IN GENERAL AND TRAINING
IN PARTICULAR FOR BROADCASTS

As mentioned in previous captions, teachers will like to listen broadcasts related to school content and methods of teaching. Apart from these, they will like to listen broadcasts related to some aspects of education in general and training in particulars. A list of such topics is given below:

They like to listen broadcasts related to :

- Ways of motivating and creating interest among students for teaching language and science.
- Maintaining discipline in classrooms as well as in schools.
- How to administer and engage students in purposeful learning in single teacher primary schools?
- Psychology—specially socialization of child, motivation problem solving, etc.
- New methods of teaching science such as enquiry, discovery methods.
- Methods of teaching modern mathematics and teaching of English through structural approach.

The teachers had given various reasons for listening broadcasts related to the above mentioned topics. These are as follows:

- The teachers want to improve their teaching.
- They want to make their teaching easy, interesting and purposeful.

- They want to improve their examination results.
- They want to improve their general standard of education.

From here it may be said that the broadcasts should also center around certain general topics apart from certain specific topics related to content and method of teaching.

4.4 LIST OF TOPICS ON WHICH TEACHERS WOULD LIKE TO WRITE LESSON FOR BROADCAST

The effectiveness of broadcasts will depend upon time, duration, and topics for broadcasts. Apart from these, its effectiveness, also, depends upon the script writing for broadcasts. Now the question arises, who should write the script for the broadcasts? It is desirable, if possible, to have script writers for broadcasts from the target audience because they will be in a better position to perceive the situation and limitations of audience realistically. Therefore, through this survey an attempt was made to locate script writers for broadcasts. from the target audience because they will be in a better position to perceive the situation and limitations of audience realistically. Therefore, through this survey an attempt was made to locate script writers for broadcasts. On the other hand, twentyseven percent of teachers expressed that they were not competent for writing the script for broadcasts and the remaining eight percent

of teachers did not respond to this question. The various topics on which they would like to write scripts for broadcasts are as follows:

Science:

- Chemistry - Physical and chemical change.
- Biology - Heart, structure and its functions.
- Geography + Internal structure of earth and transportation.
- Civics - Women education, importance and role of women in society, social evils, social and economic problems of India.

Language

- Hindi - Stories, literature, alankar, chhand.
- English - Any poetry and literature
- Urdu - Literature
- Moral Education - Ramayan
- Topics of general nature - Discipline, sports, administration and politics, duties and role of an ideal teacher, role of a teacher in rural reconstruction, agriculture and its allied craft for villages, basic education, cultural programme.

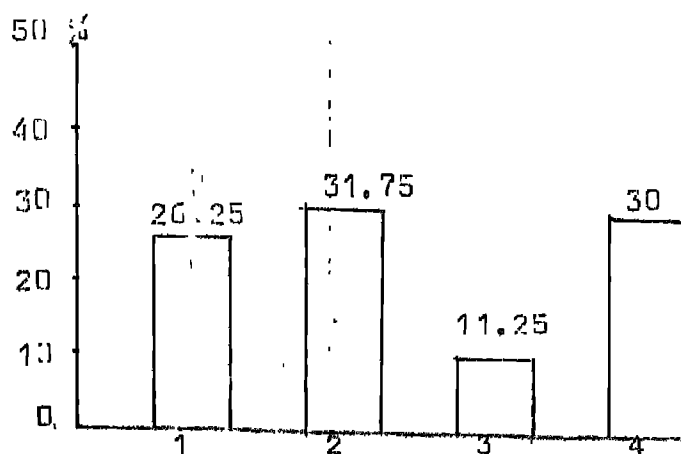
Some teachers had mentioned only subjects such as, physics, History, home-science, sanskrit and marathi, but not the topics related to these subjects. On the other hand, majority of teachers reported that they can write the script on any topic provided some guidance is given to them.

The various reasons given by those teachers who below:

- They are interested in a particular topic or subject.
- They have mastery over a particular topic.
- The topics of general nature would be of use to both students and public.
- They would like to write script for broadcasts because some of the topics have cultural, social, and moral values.

Thus, it can be said that the teachers from the target audience may be involved in preparing script for broadcast after giving necessary orientation to them and guidance from time to time.

According to Teachers Various Method is Used
in Teaching



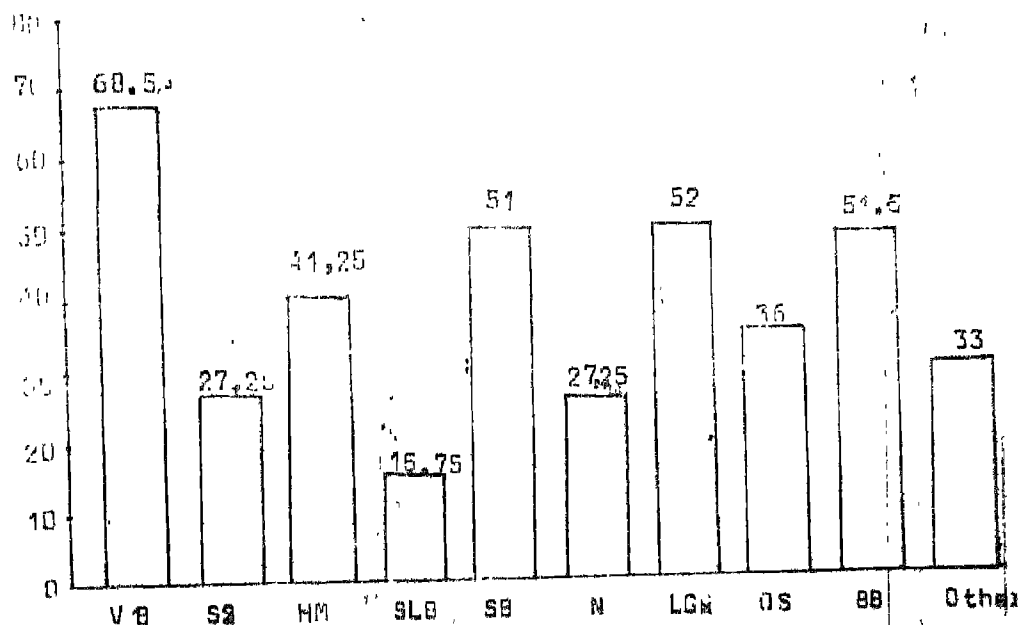
Index: 1 cm = 10%

Study to Psychological method

Study to Inquiry and discovery method.

New structural approach.

No Response.



Index : 1 cm = 10%

VB = Vividh Bharti

SS = Sangeet Sarita

HM = Hawa Mahal

SLB = Shri Lanka Binaca

N = News

LG = Lok Geet

OS = Old Song

BB = British Broadcast corporation.

O = Others.

4.4 Analysis and Interpretation of Teacher's Attitude Towards School Broadcast.

Four hundred teacher asked to express their attitude towards the proposition. Every teacher had own radio set or not? By making Y (yes) N (No) U (Undecided) 338 teachers marked Y, 39 teachers marked N and 23 teachers marked U.

Table 4.1

	Yes	No	Undecided	N	df	χ^2
Observed (fo)	338	39	23	400	2	
Expected (Fe)	133.3	133.3	133.3			472.3

For table 4.1 the obtained value of Chisquare ~~xxx~~ 472.31 for df 2 is significant at .01 level. This means that the observed frequencies differ significantly from the expected frequencies and the hypothesis of equal expected frequencies is rejected.

400 teachers asked to express their attitudes towards the proposition. It was found that 160 teachers listen different radio programme in the morning and 240 teachers listen the radio programme in the evening. By making M (morning) and E (Evening) 160 teachers mark morning and 240 teachers marked evening.

Table 4.2

	Morning	Evening	N	df	χ^2
Observed (F_o)	160	240	400	2	64
Expected (F_e)	200	200	400		

For table 4.2 the obtained value of Chisquare 64 for d.f 2 is significant at .01 level. This means that the observed frequencies differ hypothesis of equal expected frequencies is rejected. A significant proportion of teachers agree with the statement that a radio listen evening programme.

400 teachers asked to express their attitude toward the proposition, it was found that 184 teachers listen difficulty related to method activity of teaching 87 teachers no listen and 129 teachers no response. 184 teachers marked Yes 87 ~~seven~~ teachers no and 129 teachers marked Undecided.

Table : 4.3

	Yes	No	Undecided	N	df	χ^2
Observed(F_o)	184	87	129	400	2	35.49
Expected(F_e)	133.3	133.3	133.3			

For table 4.3 the obtained value of chisquare 35.49 for df 2 is significant at ,01 level. This means that the observed frequencies differ significantly from the expected frequencies and the hyposthesis of equal expected frequencies and the hypothesis of equal expected frequencies is rejected.

400 teachers asked to express that their attitudes towards the proposition. Find out the difficulties takes by teachers for teaching various subjects, through study it was found that by making D (difficulties) E (Easy) 243 teachers mark D, and 157 marked E.

Table : 4.4

	Difficulties	Easy	N	Df	χ^2
Observed(f_o)	243	157	400	2	18.48
Expected(f_e)	200	200	400		

For table 4.4 the obtained value of chisquare 18.48 for df 2 is significant at .01 level. This means that the observed frequencies differ significantly from the expected frequencies and the hypothesis of equal expected frequencies is rejected.

400 teachers asked to express their attitudes towards the proposition. Keeping this in this view on question related to this aspect was written in the questionnaire on the basis of responses of teachers it was found that 178 teachers would like to radio examination on the topic broadcast. 122 teachers do not want examination topic and 100 teachers no response. 128 teachers marked yes 122 teachers marked No, and 100 teachers marked undecided.

Table 4.5.

	Yes	No	Undecided	N	df	χ^2
Observed(f_o)	178	122	100	400	2	24.24
Expected(f_e)	133.3	133.3	133.3	400		

For table 4.5 the obtained value of Chisquare 24.24 for df 2 is significant at .01 level. This means that the observed frequencies differ significantly from the expected frequencies and the hypothesis of equal expected frequencies is rejected.

CHAPTER - V

CONCLUSIONS AND SUGGESTIONS

CHAPTER - V

Conclusions and Suggestions

Conclusions:

On the basis of the data Analysis and interpretation, previously mentioned, the following conclusions were drawn.:

1. Majority of teachers 84.5 have facilities for listening radio broadcasts.
2. Majority of teachers 54% listen different radio programmes during evening hours. The list of programmes listened by them is given in caption.
3. Majority of teachers 80% would like to have separate broadcasts for teachers.
4. The teachers would like to have broadcasts for 30 minutes, duration in the evening.
5. Majority of teachers 80% were of the opinion that they have difficulties in teaching languages, science, mathematics and geography.
- 6- Subjectwise list of topics for broadcasts as suggested by teachers is given in caption.

7. Majority of teachers 80% expressed that they have difficulties related to methods of teaching.
8. The list of topics related to education in general and training in particular for broadcasts, as suggested by teachers, is given in caption.
9. Majority of teachers 78% expressed that they would like to take examination on broadcasted topics for certification, promotion and increment.
10. Sixty five percent of teachers would like to write script for broadcasts provided orientation in writing script and guidance from time to time is provided to them. The list of topics on which the teachers would like to write script is given in caption.

The most startling findings of the study is that there is no utilization of school broadcast in Haryana State. None of the four hundred teaches, visited by the investigator, wasutilizing school broadcasts. It is depressing to note that alarge amount of money and effort is just slipping by without even being taken note by these for whom the investment has been made. The reasons of no utilization of school broadcasts are varying from school to school.

On the basis of the study of the problems leading to under utilizations of radio broadcasts. The investigator reached the certain conclusion. He also found that some of the problems where really genuine wher as other emerged simply because of distinterested attitudes on the part of Headmasters or the teacher of schools. After analysis these problems the investigator is in a position to state the factors that can facilitate radio broadcast in schools and make it an effective tool of learning and teaching.

1. State Department of Education should provide at least two radio sets and a number of 9 volts batteries to every school.
2. There should be provision of maintenance of radio sets.
3. There should be provision of supervision by the State Education Department or District Education Officers.
4. There should be provision of audio tape library.
5. For the improvement of school broadfast, there should be continuous feed back fromschools.

On the basis of study of attitudes towards radio broadcasts it is concluded that the teachers held a positive attitude towards the school broadcasts. They recognised the potential of school broadcasts in giving new and better information to the students. They believed that students learn more when radio is also used. However, at the same time they felt that the programmes at times were presented at a faster speed. They were also critical of the difficult language used in some broadcasts.

SUGGESTIONS

Keeping in view the findings of this study, a few suggestions are put in order to make the broadcasts more effective.

1. The duration of broadcasts may be of 30 mins. and it should be broadcasted in the evening.
2. The broadcasts should aim at enriching the knowledge of teachers in respect of content of school subjects, methods of teaching and some general topics like motivation, discipline, administration of single teacher primary school, etc.
3. There should be a programme-in-charge who should co-ordinate all activities related to broadcasts for the teachers.
4. There should be a team for planning, execution and follow up of the broadcasts for the teachers, This may be constituted of subject experts, methodology experts, talented and experienced teachers from schools, person from AIR, script writing expert, person from D.P.I. Office of Haryana and person from Board of Education Bhiwani, Haryana.
5. The broadcasts should be in the regional language.

6. The yearly programme of the broadcasts should be planned in advance keeping in view the school calender. This programme should be circulated to the teachers.
7. Some supplementary reading material related to the broadcasts must be provided to the teachers in advance.
8. The script writing workshops may be organised for those who will be involved in writing the script.
9. An examination may be conducted by the Board of Education, Dhiwani Haryana on broadcasted topics. A certificate may be given to those teachers who qualify the exams.

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S U M M A R Y

A N D

B I B L I O G R A P H Y

SUMMARY

Introduction:

In the field of education, the knowledge related to the content, methodology of teaching, techniques of evaluation, media of communication, teaching-learning process, establishing relationship between teacher, student and administrators, etc. is expanding day by day. In order to keep pace with this expanding knowledge it is desirable to have some sort of in-service programmes for the teachers.

Development of broadcasting in India:

Broadcasting was introduced into India by private run Radio clubs in Calcutta, Bombay, Madras and elsewhere. A regular broadcasting service, however, went on the air from 1927. When the Indian Broadcasting Company Ltd., a private concern, came into being.

Now, All India Radio comprises a countrywide network of 86 stations including two Vividh Bharati/Commercial Centres, one at Chandigarh, the other at Kanpur. Besides, there are two auxiliary studio centres at Dhubaneswar and Shantiniketan. As one of the largest news organisations in the world, AIR puts out 70 national news bulletins in 19 languages each day, 118 Regional News Bulletins in 22 languages, and 33 tribal dialects and 63 bulletins in the External Service in 7 Indian and 18 foreign languages.

Statement of the Problem:

Statement of the problems is : "A Study for Starting Radio Broadcasts for Primary And Middle School Teachers of Haryana State.

Objectives:

The investigator set the following objectives for the present investigations:

1. To study the facilities available for listening radio broadcasts.
2. To know the time and programmes listened by the teachers.
3. To study with reasons to difficulties faced by teachers for teaching various subjects.
4. To know the opinion and reasons of teachers regarding difficulties related to various teaching methods.

Delimitations:

1. The present study was delimited to Haryana State.
2. The present study was delimited to all the primary and middle schools of Haryana State.

Methodology:

The present investigation has been conducted through normative survey method.

Sampling:

The sample of the present study is consisted of the 400 teachers primary and middle school in Haryana State.

Statistical Technique Used:

The main statistical technique employed was Chi-square test.

Data Analysis and Interpretation:

This chapter deals with the analysis of data and interpretation of data. It provides the picture of reasons for under utilization of school broadcasts. It also provides the conditions that encourage radio utilization. Teacher's attitude towards school broadcasts also provides in this chapter.

Conclusions:

On the basis of the data Analysis and interpretation, previously mentioned, the following conclusions were drawn.

The most startling finding of the study is that there is no utilization of school broadcast in Haryana State. 400 teachers, visited by the investigator, was utilizing school broadcasts. It is depressing to note that a large amount of money and effort is just slipping by without even being taken note by those for whom the investment has been made. The reasons of no utilization of school broadcasts are varying from school to school.

The following conclusion can be drawn from the present study.

- ✓ 1. Majority of teachers 84.5% have facilities for listening radio broadcasts.
2. Majority of teachers 54% listen different radio programmes during evening hours. The list of programmes listened by them is given in caption.
3. Majority of teachers (80%) would like to have separate broadcasts for teachers.
4. The teachers would like to have broadcasts for 30 minutes, duration in the evening.
5. Majority of teachers (80%) were of the opinion that they have difficulties in teaching languages, science, mathematics and geography.

Suggestions

Keeping in view the findings of the study a few suggestions are put in order to make the broadcasts more effective.

1. The duration of broadcasts may be of 30 mins. ,and it should be broadcasted in the evening.
2. The broadcasts should aim at enriching the knowledge of teachers in respect of content of school subjects, methods of teaching and some general topics like motivation, discipline, administration of single teacher primary school , etc.
3. There should be a programme-in-charge who should co-ordinate all activities related to broadcasts for the teachers.
4. There should be a team for planning, execution and follow up of the broadcasts for the teachers. This may be constituted of subject experts, methodology experts, talented script and experienced teachers from schools, person from AIR, script writing expert, person from D.P.I. office of Haryana and person from Board of Education Bhiwani Haryana.

On the basis of study of attitudes towards radio broadcasts it is concluded that the teachers held a positive attitude towards the school broadcasts. They recognised the potential of school broadcasts. They in giving new and better information to the students. They believed that students learn more when radio is also used. However, at the same time they felt that the programmes at times were presented at a faster speed. They were also critical of the difficult language used in some broadcasts.

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B I B L I O G R A P H Y

BOOKS:

1. AMAN, INGRID : Utilization of school programme in Sweden, Paper presented in International Conference on Evaluation Research in Educational Television and Radio, open University, 1976.
2. Awasthy, G.C. : Broadcasting in India
Allied Publishers Pvt. Ltd.,
Bombay.
3. Chatterjee, R.K. : Mass Communication.
National Book Trust, 1978.
4. Ferguson, George, A. : Statistical Analysis & Psychology and Education.
5. Frey, Christer Trialogue: A research and Development project
Paper presented in International Conference on Evaluation and Research in Educational Television and Radio, open university, 1976.
6. Goel, D.R. : Teacher and school broadcasts, The Progress of Education, Vol. LIV, No.1, August, 1979.

7. Guilford, J.P. : Fundamental Statistics in Psychology and Education. McGraw Hill Book Company, New York, 1963.

8. Garret, Henry E.: Statistics in Psychology and Education, India Ed. Bomaby Allied Pacific Pvt.Ltd. 1966.

9. Kumar, Narendra: Educational Radio in India. Arya Book Depot, New Delhi, 1961.

10. Mc Anany, Emile: Radio Role in Development, Five, strategies of use, Academy for Educational Development, Washington, D.C., 1973.

11. Mohanty, Jaganath: Educational Technology and Communication Media, Nalanda Cuttack, 1980.

12. Mohanty, J. Educational Broadcasting. Sterling Publishers Pvt.Ltd., New Delhi.

13. Pandey, K.P.; Statistics in Psychology and Education, ~~Oxford and IB~~ Doaba House, New Delhi, 1985.

14. Payre, A.D. & : Educational and Psychological Measurement.
McMorris F.R.: Oxford and IBH, Publishing Co., New Delhi, 1972.

शोध कार्य हेतु

रेडियो प्रसारण: आवश्यकता मापक प्रश्नावली

प्रिय मित्र,

मैं शिक्षा विभाग में शोध कार्य हेतु आपसे इस सर्वेक्षण में सहायता चाहता हूँ। आपके इन उत्तरों का उपयोग केवल शोध कार्य के लिए होगा एवं इसे पूर्णतया गोपनीय रखा जाएगा, आपसे यह भी अनुरोध है कि हाँ और नहीं वाले प्रश्नों के उत्तरों को केवल सही का निशान लगाकर पूर्ण करें और दूसरे प्रश्नों के उत्तर आवश्यकतानुसार ही लिखें।

आशा है आप मुझे पूर्ण सहयोग देकर कृतार्थ करेंगे।

1- अध्यापक का नाम :

2- विद्यालय का नाम :

3- शैक्षणिक योग्यता :

4- लिंग :

5- पढ़ाई जाने वाली कक्षा:

6- अध्ययन का अनुभव :

7-(क) क्या आपके पास रेडियो या ट्रांजिस्टर है ? हाँ/नहीं

(ख) रेडियो और ट्रांजिस्टर अपने से सुनते हैं
या दूसरे से ?

उत्तर:-----

(ग) रेडियो लेने का विचार है या नहीं ? हाँ / नहीं

(घ) रेडियो लेने का विचार है तो कब तक ?

उत्तर:-----

8-(क) रेडियो कब सुनते हैं ?

सुबह / शाम

(ख) रेडियो प्रोग्रामों में से कौन-2 सा प्रोग्राम
सुनते हैं ?

1- विविधा भारती

2- संगीत-साहित्य

- 3- हवा महल
- 4- श्री लंका बिनाका
- 5- स्कूल-प्रसारण
- 6- समाचार ए•आई•आर• (बी बी सी)
- 7- लोक गीत
- 8- पुराने फिल्मों नामें
- 9- अन्य (नाम लिखें) _____

9- अध्यापक के लिये किन्-2 कारणों से रेडियो लाभदायक है ?

उत्तर : _____

10- (क) आप कितने समय तक रेडियो सुनते हैं ?

उत्तर : _____

(ख) आप कौन से समय में रेडियो सुनना अधिक पसन्द करते हैं ? सुबह/शाम

(ग) आप रेडियो सुबह और शाम में से किस समय अधिक सुनना पसन्द करते हैं और क्यों ?

उत्तर: _____

(घ) आप सुबह/शाम कितने समय तक रेडियो सुनना पसन्द करते हैं ?

10 मिनट

15 मिनट

30 मिनट

और उससे ज्यादा

11- (क) प्राथमिक व माध्यमिक स्तर पर अध्ययन के समय किन्-2 विधायों का प्रयोग करते हैं ?

उत्तर: _____

(ख) आपको किस विषय को पढ़ाने में कठिनाई महसूस होती है ?

(5) विज्ञान

2- अंग्रेजी

3- हिसाब

4- अन्य विषय

(ग) आप किस विधि से पढ़ाना पसन्द करते हैं ?

अंतर: _____

12- क्या आपको रीडियों के द्वारा किसी विषय की कठिनाई को दूर करने के लिए आवश्यकता महसूस होती है ? हा/नहीं

13- क्या आप शिक्षण विविधा से सम्बन्धित कोई प्रसारण सुनते हैं ? हा/नहीं

14- आप किस विषय पर भाषाण देना चाहेंगे और आपका (टोपिक) विषय-सम्बन्ध क्या होगा ?

15- आप विद्यार्थी को गतिशील एवं सृजनात्मक बनाने में किस विधि का अनुसरण करेंगे ?

(क) मनोवैज्ञानिक विषय का अध्ययन करा करेंगे

(ख) नवीन वैज्ञानिक विधि के द्वारा, जैसे पूछताछ, छात्र विधि,

(ग) अंग्रेजी एवं गणित की नवीन संरचना उपागम के द्वारा,

शोध निर्देशक

(डा० आर सी हुड्डा)

शिक्षा विभाग,

महर्षि दयानन्द विश्वविद्यालय, रोहतक

शोध कर्ता,

(सुरेश कौशल)

एम ए, एम एड (विद्यार्थी)